What to do if caught outside in a thunderstorm

- Attempt to get into a building or car.
- If no structure is available, get to an open space and squat low to the ground as quickly as possible. If in the woods, find an area protected by a low clump of trees. Never stand underneath a single large tree in the open. Be aware of the potential for flooding in low-lying areas.
- Crouch with feet together and hands on knees.
- Avoid tall structures such as towers, tall trees, fences, telephone lines or power lines.
- Stay away from natural lightning rods such as golf clubs, tractors, fishing rods, bicycles or camping equipment.
- Stay away from rivers, lakes or other bodies of water.
- If you are alone on a level field or prairie and you feel your hair stand on end, this indicates that lightning is about to strike. Immediately crouch down, removing all metal objects. Do not lie flat on the ground. ®

Estimating the Distance from a Thunderstorm

Because light travels much faster than sound, lightning flashes can be seen long before the resulting thunder is heard. Estimate the number of miles you are from a thunderstorm by counting the number of seconds (or without a watch, count 1001, 1002, 1003...) between a flash of lightning and the next clap of thunder. Divide this number by five. Remember, as long as you can hear thunder, there is the risk of lightning striking the ground even if the storm cloud is not overhead. ®



SUMMER OUTLOOK

A ccording the Climatic Predication Center long range seasonal forecasts, the Summer 2000 outlook for the Inland Northwest calls for slightly above normal temperatures and near normal rainfall for June-August. ®

WEATHER WATCHER

National Weather Service 2601 North Rambo Road Spokane, WA 99224-9164



WEATHER WATCHEI National Weather Service Quarterly Report

June 2000 Editor Robin Fox 9ssue # 2 Vol. 5

Welcome to summer! Though this spring has brought plenty of cool and wet weather to the Inland Northwest, warmer and drier conditions are on tap for the upcoming months. With summer, comes vacations, camping, swimming, boating and other outdoor recreation. This is also the time of the year for thunderstorms and flash flooding. It is important to stay current with the latest weather forecasts and bulletins especially when you plan any outdoor activities. The NOAA Weather Radio (NWR) is a great resource. It is a 24-hour weather broadcast from the NWS. You can access this broadcast from specially built receivers, marine radios, CBs and scanners. Check with your local electronic shop for further information.

The main purpose of this publication is to keep our users informed about our services and programs, and to recognize those who help us accomplish our mission. Weather spotters and observers, in addition to our friends in the media and emergency management, continue to be an extremely valuable part of the NWS mission.

If there is something you would like to see in the next newsletter or have comments about a previous issue, please let us know.

National Weather Service 2601 N Rambo Road Spokane, WA 99224-9164

(509) 244-0110 www.wrh.noaa.gov/spokane

DROUGHT

Dry, dusty, arid, desiccated, shriveled and parched - these adjectives conjure up descriptive thoughts of drought, yet the term drought is difficult to define quantitatively. This is because its meaning is dependent upon the context in which it is being used. A drought means one thing to a farmer and slightly different to a city planner, economist or fire fighter. The most popular and widely accepted definition is meteorological, usually an expression of precipitation's departure from normal over some period of time. An agricultural drought occurs when there is not enough soil moisture to meet the needs of a crop at a particular time.

In order to analyze the deviations of precipitation over a period of time and space, drought indices are calculated which compare the relative dryness or wetness affecting water sensitive economies. Two of the more common indices used are the Palmer Drought Severity Index and the Crop Moisture Index. The Palmer Drought Severity Index indicates the prolonged and abnormal lack or excess of moisture. The Crop Moisture Index gives the short-term or current status of agricultural drought and moisture surplus which can



change rapidly from week to week. Both indices indicate general conditions and not local variations caused by isolated rain showers. Each is a valuable climatological tool used to help determine a variety of activities including water supply, forest fire planning, crops and field planning.

Near the middle of each month, the Climate Prediction Center (CPC) of the National Weather Service issues a seasonal drought assessment. In addition, the CPC along with the National Drought Mitigation Center in Lincoln, Nebraska, issues a weekly drought assessment called the US Drought Monitor. These Monitors review national drought conditions and show the potential impacts for various economic sectors.

According to the latest bulletins, eastern Washington and north Idaho are not in a drought, but there are many areas of the US experiencing unseasonable dryness. As of the first week of June, the Drought Monitor highlighted severe drought conditions across the South and portions of the Midwest. One area stretches from eastern Arizona, southern New Mexico to southwest Texas; while another spans across the southern sections of Louisiana and Mississippi, across much of Alabama, Georgia and Florida. Eastern Nebraska, southern Iowa and Illinois and much of Missouri are also experiencing severe drought conditions. Unfortunately, the long range forecasts indicate little relief this summer to these drought stricken areas. For more information on droughts and drought indices, visit the following

web sites: enso.unl.edu/ndmc/ and www.cpc.noaa.gov/. ${\mathbb R}$

R

ON THE INSIDE
StormReady,
Spring Review,
Snowmelt,
And much more!

Looking for a few good spotters

 $oldsymbol{\mathsf{T}}$ n order to provide a better service to the public, we need your ♣ help. The NWS in Spokane would like to conduct periodic surveys to receive your feedback on how we are doing. We are looking for one to three individuals from each county who have an avid interest in the weather and follow the weather forecasts. Having an email address for quick responses is beneficial. If you are interested in volunteering, contact Robin Fox on the spotter line or robin.fox@noaa.gov. ®

Will your community be Storm Ready?

ust how well is your community prepared for severe or significant weather? Could it be better prepared? To help ensure communities are prepared as well as possible, the National Weather Service has developed a new program called *StormReady*.

The StormReady program is intended to encourage severe and significant weather preparedness activities in communities, and to publicly recognize those communities that have achieved a notable level of preparedness. The public recognition comes in the form of an accreditation when the community has met criteria collaboratively established by emergency management and NWS officials.

Currently, StormReady is a pilot project being tested in the Tulsa, Oklahoma area where it was originally developed. So far, the response from emergency management has been positive. If the concept proves successful, StormReady may be expanded to a national program. More information on StormReady can be reached at www.nws.noaa.gov/stormready. ®

WEATHER SPOTTER CHECKLIST

- **FUNNEL CLOUD**....Watch for cloud rotation aloft
- **TORNADO**...Watch for rotation & damage on the ground
- HAIL....Pea-sized or larger
- **HEAVY RAIN**....1/2 inch in 1 hr; 1.5+ inches in 24 hrs
- **HEAVY SNOW**...4 inches in 12 hrs; 6+ inches in 24
- **FLOODING...**Of any kind. Report changing water lev-
- **POOR VISIBILITY**....1/2 mile or less
- TRAVEL PROBLEMS...Any conditions due to weather
- **STRONG WINDS...**40 mph +, or any damage
- ANY DAMAGE, INJURY OR LOSS OF LIFE DUE TO WEATHER...Include location, time and specific cause.

If you observe any of these conditions, please call the NWS in Spokane and make a report at

Spring 2000 Review

March weather in the Inland Northwest was about as close to historical averages as you can get, both for temperature and precipitation in Spokane, Wenatchee and Lewiston. High temperatures at Wenatchee were a bit cooler than normal, but overall the weather was quite typical for this time of the year and not just for the monthly average. There was not one day in March, at any of the three sites, that experienced above or below normal temperatures by 10° or

That changed in April as the weather warmed up considerably. The first few days of April were 10 to 15° above normal with most sites seeing their first 70° readings. On the 14th, an usually cold Canadian air mass moved into the Idaho Panhandle giving some valley locations as much as 4" of late season snow. The Spokane Airport recorded a new 24-hour rainfall record for April with 1.53". Meanwhile, locations along the east slopes of the Cascades had a hard time getting any precipitation at all. Entiat received only 0.07", while downtown Wenatchee picked up only 0.03". This was similar to April of 1999 when Wenatchee picked up a mere 0.07" of rainfall. Some other meager amounts included Leavenworth (0.20") and Conconully (0.19"). April also saw the first round of significant spring thunderstorms in the area. On the 27th, an upper level trough swung through the area producing numerous thunderstorms. Most of these just produced rain and lightning, but dime-sized hail was observed around Spokane.

Any hopes of a warm spring ended in May, which again was similar to last year. It wasn't that there were any brutally cold days, as much as there just were not any real warm ones. The Spokane Airport failed to reach 80° by the end of the month. On average this occurs on May 11th. Meanwhile, Wenatchee could only muster 82°. The latest it has ever taken Wenatchee to hit 83° is June 7th. Along with the cooler temperature came increased precipitation. Most sites received more than the normal amount for the month. The 11th was the coldest day of the month, with some light snow in the Panhandle and northeast Washington. More severe thunderstorms also occurred in May, with dime-sized hail falling in Lewiston on the 5th. Another especially wet system finished off the month with many sites receiving around 1" of rainfall on the 30th. ®

Spring Weather Statistics

Wenatchee Airport

	iviai	Apr	iviay	rotai
Avg High Temp	51.2	64.9	68.9	61.7
Depart from Normal	-1.7	+3.0	-2.0	-0.2
Avg Low Temp	33.8	41.6	46.7	40.7
Depart from Normal	+0.7	+2.1	-0.1	+0.9
Total Precip	0.66	0.17	0.26	1.09
Depart from Normal	0.04	-0.45	-0.27	-0.68

Lewiston Airport

	iviai	Aþi	iviay	rota
Avg High Temp	53.3	66.1	70.2	63.2
Depart from Normal	-0.8	+4.1	-0.6	+0.9
Avg Low Temp	35.1	42.6	47.1	41.6
Depart from Normal	+0.4	+2.9	+0.6	+1.3
Гotal Precip	0.97	0.99	1.46	3.42
Depart from Normal	-0.12	-0.14	+0.15	-0.11

Spokane Airport

	•	Mar	Apr	May	Total
	Avg High Temp	47.6	60.2	64.2	57.3
	Depart from Normal	0.0	+3.2	-1.7	+0.5
	Avg Low Temp	30.3	36.2	41.8	36.1
	Depart from Normal	+0.4	+1.2	-0.3	+0.4
	Total Precip	1.62	2.16	2.21	5.99
,	Depart from Normal	+0.13	+0.98	+0.80	+1.91
	Total Snowfall	1.1	Τ	0.3	1.4
	Depart from Normal	-2.5	-0.9	+0.1	-3.3

Paper vs. Electronic

With the advent of new technology, we are able to post the Weather Watcher online through the NWS web page.

If you can receive this newsletter via the internet and prefer not to get the paper copy in the mail, we can accommodate your request. We will remove your name from our newsletter mailing list. Just email your requests to robin.fox@noaa.gov. ®

NOAA Weather Radio **Frequencies**

Eastern Washington 162.550 MHz Okanogan 162.400 MHz Spokane Wenatchee 162.475 MHz 162.550 MHz Yakima

North Idaho

Bonners Ferry 162.500 MHz Lewiston 162.550 MHz McCall 162.475 MHz

Spring Snowmelt

he 2000 spring snowmelt season turned out to be near normal I in many ways. Mountain snowpack, precipitation, and temperatures deviated little from the long term normals. Flooding was limited to a few rivers and streams. After a warmup in early April, several days of heavy rainfall brought the Coeur D'Alene, St. Joe, and Little Spokane Rivers to flood levels by mid April. Fortunately, the flooding was only minor. Perhaps the most dramatic flows seen this season were on the Spokane River where the water running through downtown Spokane was at its highest levels in three years, creating many dramatic views. With the abundant runoff from the snowmelt, this has been an excellent year for water enthusiasts. Look for the high water levels to quickly subside in June as we head into our dry season. ®

WEATHER WATCHER

NWS Spokane

Meteorologist In Charge John Livingston

Administrative Assistant Rose Reilly

Warning Coordination Meteorologist Ken Holmes

Science Operations Officer Ron Miller

Data Acquisition Program Manager Robert Bonner

> **Service Hydrologist** Charles Ross

Senior Forecasters Gary Bennett Todd Carter Jon Fox Robin Fox Don Moore Claudia Cox

General Forecasters Lyle Hammer Rocky Pelatti Paul Bos Andy Haner Tracy Cox

Hydro-Meteorological Technicians

Verne Ballard Irv Haynes Milt Maas Stan Savoy Larry Sossaman

Electronic System Analyst Bob Cummings

Electronic Technicians Merri Wallace

Facilities Technician Mike Belarde

> **Student Intern** Laurie Koch

Trivia answer:

Spokane: 55 ° in 1902 Wenatchee: 66° in 1982 Lewiston: 61° in 1986